SERIAL NO.:

10/724,399

FILED:

December 1, 2003

Page 2

AMENDMENTS TO THE CLAIMS

Please amend and add the claims to read as follows:

1. (Original) A method for three-dimensional printing of a three-dimensional model, said method comprising:

selectively dispensing a first interface material and a second interface material from a printing head, said first interface material and said second interface material being different; each of said first interface material and said second interface material comprising photopolymer materials.

- 2. (Currently amended) A method according to claim 1, wherein one of said first interface material and <u>said</u> second interface material includes reactive acrylates and is curable by the application of radiation.
- 3. (Original) A method according to claim 1, comprising ejecting said first interface material and said second interface material in a given layer in different mix formulations to form a specified type of material.
- 4. (Original) A method according to claim 1, comprising curing said first and second interface materials using radiation, said radiation being any one of a group including ultraviolet radiation, infra-red radiation and E-beam.
- 5. (Currently amended) A method according to claim 3, wherein <u>one of said mix</u> [[formulation]] <u>formulations</u> of <u>said</u> first interface material and <u>said</u> second interface material forms a model layer.
- 6. (Currently amended) A method according to claim 3, wherein said mix formulation of said first interface material and said second interface material forms a support layer.

SERIAL NO.:

10/724,399

FILED:

December 1, 2003

Page 3

7. (Currently amended) A method according to claim 3, wherein one of said mix [[formulation]] formulations of said first interface material and said second interface material forms a release layer.

8. (Currently amended) A system for three-dimensional printing of a three-dimensional model, said system comprising:

a printing head for selectively dispensing a first interface material and a second interface material, said first interface material and said second interface material being different:

each of said first interface material and said second interface material comprising photopolymer <u>material</u> [[materials]]; and

a source of radiation for curing of at least one of said interface materials.

- 9. (Currently amended) A system according to claim 8, wherein <u>at one</u> of said first interface material and <u>said</u> second interface material includes reactive acrylates.
- 10. (Original) A system according to claim 8, wherein said printing head is an ink-jet printing head.
- 11. (Original) A system according to claim 8, wherein said second interface material is curable.
- 12. (Original) A system according to claim 8, wherein said first interface material and said second interface material are ejected in a given layer in different mix formulations to form different types of materials.
- 13. (Currently amended) A system according to claim 8, wherein said radiation is [any one of a group including] selected from a group consisting of ultra-violet radiation, infra-red radiation and E-beam.

SERIAL NO.:

10/724,399

FILED:

December 1, 2003

Page 4

14. (Currently amended) A system according to claim 12, wherein said mix [[formulation]] formulations of said first interface material and said second interface material [[forms a model layer]] form model layers.

- 15. (Currently amended) A system according to claim 12, wherein said mix [[formulation]] formulations of said first interface material and said second interface material [[forms a support layer]] form support layers.
- 16. (Currently amended) A system according to claim 12, wherein said mix [[formulation]] <u>formulations</u> of <u>said</u> first interface material and <u>said</u> second interface material [[forms a release layer]] <u>form release layers</u>.
- 17. (New) A method for three-dimensional printing of a three-dimensional component, said method comprising:

selectively dispensing a first interface material and a second interface material from at least one printing head, said first interface material and said second interface material being different;

wherein at least one of said first interface material and said second interface material comprises a photopolymer material including reactive acrylates.

- 18. (New) A method according to claim 17, wherein said first interface material and said second interface material are dispensed by one or more inkjet printing heads.
- 19. (New) A method according to claim 17, further comprising curing said photopolymer material using radiation.
- 20. (New) A method according to claim 17, further comprising curing said first interface material and said second interface material using radiation.

SERIAL NO.:

10/724,399

FILED:

December 1, 2003

Page 5

21. (New) A method according to claim 19, wherein said radiation is selected from a group consisting of ultra-violet radiation, infra-red radiation and E-beam.

22. (New) A method according to claim 20, wherein said radiation is selected from a group consisting of ultra-violet radiation, infra-red radiation and E-beam.

23. (New) A method according to claim 17, wherein said photopolymer material forms the three-dimensional component.

24. (New) A method according to claim 17, wherein said photopolymer material forms a model layer.

25. (New) A method according to claim 17, wherein said photopolymer material forms at least part of a support layer.

26. (New) A system for three-dimensional printing of a three-dimensional component, said system comprising:

at least one printing head for selectively dispensing a first interface material and a second interface material, said first interface material and said second interface material being different;

wherein at least one of said first interface material and said second interface material comprises a photopolymer material including reactive acrylate; and

a source of radiation for curing at least one of said first interface material and second interface material.

27. (New) A system according to claim 26, wherein said at least one printing head is an ink-jet printing head.

28. (New) A system according to claim 26, wherein said first interface material and said second interface material are ejected in a given layer in different mix formulations.

SERIAL NO.: 10

10/724,399

FILED:

December 1, 2003

Page 6

- 29. (New) A system according to claim 28, wherein said mix formulations form different types of material.
- 30. (New) A system according to claim 28, wherein said mix formulations form a model layer.
- 31. (New) A system according to claim 28, wherein said mix formulations form a support layer.
- 32. (New) A system according to claim 28, wherein said mix formulations form a release layer.
 - 33. (New) A system according to claim 26, wherein said radiation is selected from a group consisting of ultra-violet radiation, infra-red radiation and E-beam.